Complete Summary

TITLE

Emergency medicine: percentage of patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia with an appropriate empiric antibiotic prescribed.

SOURCE(S)

American College of Emergency Physicians, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Emergency medicine physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2006 Oct. 14 p. [6 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia with an appropriate empiric antibiotic prescribed.

RATIONALE

All patients need to be treated empirically according to the guideline recommendations.*

*The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical quidelines and represent the evidence base for the measure:

All patients should be treated empirically. Patients treated as outpatients with no cardiopulmonary disease and no modifying factors should be treated with advanced generation macrolide: azithromycin or clarithromycin or doxycycline. Patients treated as an outpatient with cardiopulmonary disease and/or risk factors should be treated with beta lactam plus macrolide or doxycycline or fluoroquinolone alone. Empiric therapy based on the American Thoracic Society (ATS) guidelines lead to better outcomes than if the guidelines are not followed. (ATS)

Fluoroquinolones (gatifloxacin, gemifloxacin, levofloxacin, and moxifloxacin) are recommended for initial empiric therapy of selected outpatients with community-acquired pneumonia (CAP). Other options (macrolides and doxycycline) are generally preferred for uncomplicated infections in outpatients. (Infectious Diseases Society of America [IDSA])

A macrolide is recommended as monotherapy for selected outpatients, such as those who were previously well and not recently treated with antibiotics. A macrolide plus a beta lactam is recommended for initial empiric treatment of outpatients in whom resistance is an issue. (IDSA)

PRIMARY CLINICAL COMPONENT

Emergency department (ED); community-acquired bacterial pneumonia; appropriate empiric antibiotic

DENOMINATOR DESCRIPTION

All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients with an appropriate empiric antibiotic* prescribed

*See the "Rationale" field for recommended antibiotics.

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

 A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

• <u>Update of practice guidelines for the management of community-acquired</u> pneumonia in immunocompetent adults.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement National reporting

Application of Measure in its Current Use

CARE SETTING

Emergency Medical Services Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patients aged 18 years and older with the diagnosis of community-acquired bacterial pneumonia

Exclusions

- Documentation of physician reason(s) for not prescribing an antibiotic
- Documentation of patient reason(s) for not prescribing an antibiotic
- Documentation of system reason(s) for not prescribing an antibiotic

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients with an appropriate empiric antibiotic* prescribed

*Includes medication from one of the following four drug classes: fluoroquinolones, macrolides, doxycycline, beta lactam with macrolide or doxycycline (as defined by the current American Thoracic Society/Infectious Diseases Society of America [ATS/IDSA] guidelines).

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Administrative data Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #7: empiric antibiotic for community-acquired bacterial pneumonia.

MEASURE COLLECTION

The Physician Consortium for Performance Improvement® Measurement Sets

MEASURE SET NAME

Emergency Medicine Physician Performance Measurement Set

SUBMITTER

American Medical Association on behalf of the American College of Emergency Physicians, the Physician Consortium for Performance Improvement®, and the National Committee for Quality Assurance

DEVELOPER

American College of Emergency Physicians National Committee for Quality Assurance Physician Consortium for Performance Improvement®

FUNDING SOURCE(S)

Unspecified

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FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2006 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

American College of Emergency Physicians, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Emergency medicine physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2006 Oct. 14 p. [6 references]

MEASURE AVAILABILITY

The individual measure, "Measure #7: Empiric Antibiotic for Community-acquired Bacterial Pneumonia," is published in the "Emergency Medicine Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on October 12, 2007. The information was verified by the measure developer on November 21, 2007.

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Measures including specifications

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